

# BREEDING THE SPORTING DOG

By JOSEPH A. GRAHAM

TO the "questing intelligence" breeding is the main end of all studies in animals. It is attractive to mental curiosity because it is both momentous and elusive.

For purposes of biological science there is no difference between homo and canis. If the inquirer can discover the operations of cause and effect in the heredity of one mammal, the whole book of life lies open. So far, however, there is not much to tell; will not be much, now, until the biologists work out Mendel's law.

If a purveyor of formulas gives you advice about breeding dogs, go your way and take the opposite course. In so doing you are as likely to succeed, and you will have the satisfaction of being independent and original.

Everybody has copious opinions about breeding; nobody has much knowledge. In all trades it is so easy to write words of wisdom and so hard to pay a dividend; so easy to see ghosts and so hard to make them walk. Commentators on the breeding of horses and dogs can construct more theorems and present more deductions in an hour than can be proved in fifty years of experiment.

For it must be remembered that breeding is not mathematics, but merely experiment and empiricism; that, except within certain broad limits, nobody can tell where a calculation will land. John H. Wallace, the trotting horse authority, once said that in breeding two and two sometimes make four, but often only three. That phrase condenses the story as far as it has gone. To every breeding formula the answer is: It may be so; sometimes it is and sometimes it isn't.

There are two broad rules which may be counted upon. One is that a breed or variety, in proportion to the length and thoroughness of its establishment, will reproduce its general characteristics. The other is that nothing can change within the purview of a human generation the essential characteristics of a genus. Each characteristic can only be increased or diminished. None will disappear and there will not be new ones. For example, every animal of the dog tribe, from a coyote to St. Bernard, has an acute nose and depends much on the olfactory sense for its knowledge of objects. Every one of the tribe also "points" more or less in approaching hidden game, and every one retrieves or carries things about in its mouth. These characteristics are intensified in field dogs; but any dog can be, if its game-hunting instinct has not been too much bred away, easily taught to recognize hidden game, point, back, and retrieve. In field dogs, since these ineradicable nerve habits of all canines have been intensified by long years of selection, the production of a special aptitude in breeding and the development of it in training may be forecast with assurance. The same rule

holds in general physical qualities. Beyond that fact not much is predicable. The breeder may succeed in getting good dogs, but one would wait long to find a dog which at maturity exactly realized in looks or character the image which was before the breeder's mind when he made the mating. A phenomenon never reproduces itself; it may produce something as good or better but never a facsimile. So you can't tell about the sons of great dogs any more than about the sons of great men.

The making of cut-and-dry systems and rules has an almost morbid attraction for both authors and audiences. Hundreds of horse breeders believe in the "figure" system—a rank absurdity in its main propositions and yet having a certain valuable attachment of facts and suggestions. Some dog breeders have a rule of breeding twice in and once out, and some alter the proportions to twice out and once in. One of the commonest calculations is that if one side of the house is big the other should be little, or *vice versa*; so with line and coarseness. If a man has a potterer he thinks to get the golden mean by breeding to an uncontrollable bolter. The favorite formula among English setter men is to get into the pedigree fifty per cent. of Laverack and fifty per cent. of Duke-Rhoebe blood. I suppose that in a year or two pointer men will begin to figure on the same percentages with King of Kent and Mainspring. One man has childlike faith in the rule of a big dam and a small, nervous sire. Another believes in the small dam and the big, masculine, rugged sire. Some purists hang out a "no trespass" sign against an outcross. This has come to be a fetich with many field dog breeders, though the Llewelins are the result of a sharp outcross and though in pointers Mainspring and Rip Rap both came from a cross of Devonshire pointers on the Drake and Hamlet blood. Another set of breeders are perpetually looking for crosses, though the records should tell them that a cross, while often useful and necessary, is in many more cases a grasping at the shadow and losing the substance.

Inbreeding is a subject of most positive opinions and most baseless sermonizing. Perhaps nine people out of ten believe that inbreeding produces puny and degenerate descendants. Like other breeding practices, sometimes it does and sometimes it doesn't. One of the finest families of Irish setters, of which the famous Geraldine was a member, came originally from an accidental union of Palmerston with his full sister, Quail. The most remarkable incident of inbreeding of English setters in this country was that of Dr. Stark, then of Wisconsin and afterward of South Dakota. Taking Mr. Adams's Dora, by Duke out of Rhoebe, as a foundation, her daughter by Rock—he also carrying Duke-Rhoebe blood

—was bred to Bergundthal's Rake, he being closely inbred to Rhoebe. From this union came Madam Llewelin, and she was bred back to Rake, producing a large lemon and white dog named Wild Rake. This dog went into the hands of Mr. W. W. Titus, and afterward belonged to Messrs. W. C. Kennerley and P. H. O'Bannon of Virginia. The last I heard of him he belonged to Mr. Jester of Delaware. Wild Rake was of little or no value, as all these breeders proved, but he had plenty of size and physical vigor and no deficiency of intelligence—that is, of intelligence for ordinary purposes. But from the continuous inbreeding to old Rhoebe, and, perhaps, from the Rock blood which he carried, he had little definite ambition or responsiveness to training. I had one litter from him which were all large clogs, two of them almost giants. The largest ones were fairly good on birds, but very slow. One of the medium-sized brothers became an exceptionally fine bird dog, but gave considerable trouble to the trainer at first by his gunshyness and timidity. The other was rather hard-headed and obstinate but developed into a fast, high-class, and valuable dog. I think that these two drew their best characteristics from their dam, which had a strong inheritance of blood from Bolus's Belton. There are some other notable experiments of inbreeding. One was the mating of Gath, a grandson of Gladstone, with Gem, a daughter of Gladstone. The result was a litter of large, strong and gifted dogs, the leaders of which were Gath's Mark and Gath's Hope. Marse Ben, a large, strong, vigorous dog, of which I have frequently spoken in this book, is a result on his dam's side of close inbreeding; and he has lately been bred back to his dam, giving a litter of puppies not lacking in size or strength. Tom Boy, the finest example among setters of endurance at high speed, is close up to Roderigo on both sides. Mr. James Cole of Kansas City bred Lady Cole back to her sire, Cincinnatus' Pride, and got a litter of strong beautiful puppies.

These examples are not cited to persuade anybody that inbreeding is a rule to follow for its own sake. Indiscriminately applied, such a rule would be vicious. I mention them to show that there is no law of inheritance under which inbreeding produces puny and weak specimens. It all depends on selection and circumstances. One trouble about close line breeding is the tendency after the second generation to split up into the original elements.

Some people will tell you that a sire and dam must both be good in order to produce good descendants; and yet Gladstone's dam was individually worthless, and Rodfield's dam has been described to me as of no value except for her pedigree. It frequently happens that a dog is much better than either his sire or dam. I can cite an example in a litter which I bred from the greyhound Mystic Maid, herself only a moderate performer. I bred her to Astronomy, a still more moderate dog, and the re-

sult was one of the best litters of greyhounds I ever saw. All of them were unlucky except Astral Maid. She alone came to coursing form. During the season when she was in good training she won every stake in which she was entered. She was far superior in looks and coursing quality to either her sire or dam. Another greyhound case is that of Monsoon, winner of the American Waterloo Cup of 1901. Monsoon's dam, Little Fairy, was a dwarfish and whippet-looking thing, but well bred, Monsoon, except for a tendency to run cunning, was one of the best greyhounds ever started in St. Louis, a class beyond either sire or dam.

Wisecracks often say that breeders should wait until animals are fully matured before breeding; yet the pointer, Dot's Pearl, had six winners in two litters, all produced before she was two years old. My own experience is that the very first litter is the best and is all the better if produced from the first season.

Perhaps the safest advice to the young breeder is to recommend the rule of Lord Falmouth in breeding race horses. His idea was to use very few mares, but to have none except such as had won a classic stake. Then he bred these mares to the best winners of classic stakes. In other words, he selected the best winners he could get and bred them to the best winners he could find. Such a course will be disappointing, but in the long run it must necessarily keep a man as near the front as any rule would carry him. For example, if he had followed the rule in pointers, he would probably have a continuous line of breeding from Trinket's Bang, King of Kent, Duke of Hessen, Rip Rap, and Jingo. In setters, his line would be from Gladstone, Count Noble, Roderigo, Count Gladstone IV., Antonio and Tony Boy. Of course, he might have been led off by breeding to such dogs as Wun Lung, Topsy's Rod, and Rowdy Rod, all of which were brilliant dogs but inferior as producers. Still, on the whole he would have been successful.

There is another breeding rule of equal horse-sense value. That is to get what the noted breeder and trainer, Andy Gleason, used to call "old pie" bitches. Gleason meant those females which, without any apparent reason, have the quality of reliably producing high-class dogs, no matter how mated. Gleason himself had one of this kind in Don's Nellie. Dave Rose had one in Lady May. Titus had one in Betty B. All of these were setters. Pearl's Dot is an example in pointers, and Mr. Lowe's White Lips the most conspicuous in greyhounds. Perhaps the best advice in breeding is that the breeder should secure bitches of this kind. Neither I nor anybody else could tell him where to get them, but the advice is none the less good. Very few of the "old pie" bitches would have been selected by tape-line critics. Betty B. was fairly well bred, but she weighed less than thirty pounds and would have been rejected by any

theorist. White Lips was not fashionably bred as Englishmen would call it, but she reached results by some inherent virtue of reproduction.

Mr. Charles Askins, an experienced breeder and handler and secretary of the Handler's Association, has a rule that the important thing in breeding is to know what the sire and dam are. As he puts it, a man can take chances on anything back of the third generation if the sire and dam are both winners of vigorous character. Yet, against Mr. Askins' convincing illustrations, one may remember the experiment of Mr. Hulman of Indiana, and Captain O'Bannon of Virginia, who organized the famous Blue Ridge Kennel, with Rose as trainer. At one time these gentlemen had almost a monopoly of the great setters of the country, including Gath's Mark, Gath's Hope, Antonio, and Dan Gladstone, together with such matrons as Fannie Murnan, Lily Burges, Gossip and Laundress. This kennel was by no means a failure, and the experiments produced many winners; but it sadly disappointed its projectors. They expected to turn out phenomons. The blood which they produced is still valuable in field dog kennels. A similar experience befell the Manchester Kennel, at the head of which was that unrivalled bird finder, Gleane's Sport.

When considered impartially, the breeding of field dogs has been a story of real success. There are not so many failures as the pessimists think, and the steady progress has been upward. The average has been remarkably good. It must be remembered in all breeding that the winners are comparatively few. No matter how good the breeding theory and practice, the dogs which stand out as superior to all other dogs must always be the exceptions. That proposition proves itself but is not always believed.

There is an inexorable law which book authorities do not seem to recognize. It is the law which tends unceasingly to a reproduction of the average quality of the breed. It constantly pulls upward to the average and constantly pulls down. You can take all the phenomons of a season for breeding purposes and the chances are that your result will be merely an excellent average of the breed. Some people have a way of charging this to atavism. As a matter of fact, atavism, or the tendency to throw back to some remote ancestor, is not as threatening as the talk about it would indicate. The law of perpetuating averages is not only threatening, but it is ever present and eternal. It is that law which the breeder must recognize and reckon with. His wonderful winners will come along occasionally; but he must understand that, whatever his breeding stock, he does very well if he get results up to a good standard.

Discussion of breeding and citation of facts and illustrations could go on indefinitely; but this chapter can stop at no better place than with the foregoing statement of

the law of averages, a law of such force that the greatest individual dog cannot often raise the level, while despised individuals can gain posthumous laurels through the greatness of their children. The only practical application of the law is to use the best individuals of the best descent, and then be prepared for anything.

Breeding is all a matter of probabilities. The skilful breeder minimizes the danger of defects. When he gets a fine specimen all the world hears him "holler." When he gets a dozen plugs he remembers that silence is golden; he shuns fame. Even about his fine ones his hindsight is better than was his foresight as to how he did the trick. And this is the art and science of breeding.

Mendel's law is the present sensation among students of heredity. Any one who expects to acquire trustworthy knowledge of the rules under which nature conducts inheritance must watch the labors of the investigators who are developing the Mendel discovery. Mendel gave it out years ago, but the scientific world is just making use of his work. Roughly stated, Mendel's law is that when certain plants are crossbred, and the descendants are interbred, a proportion will have the prepotency of one ancestor, a proportion that of the other, and a proportion, a combination of both. In other words, the crossbred form is not permanent. How far the law applies to animals has not at this time been ascertained. But at least, the Mendel law bids fair to completely upset some of the most tenaciously held deductions of old writers, who thought that when they said "like produces like" they could make their corollaries and multiply their factors as if they were dealing with inanimate paints or building material. The law seems to deny most of the old notions about inbreeding, or to call for new explanations. Whatever the inquiry may settle, the lecturer on the "science of breeding" must pause until the limits of Mendel's law are determined by verified observation.

Breeding is an uncertain and profitless amusement for most people at best. I am tempted to cite the case of Mr. Lavin of St. Louis in greyhounds. He has spent enough money and owned enough good clogs to have produced any number of phenomons; but sickness and unlucky handlers have kept him rather in the background, though he has done some winning. Mr. Lavin imported Warburton, a big black son of Epicharmus. Warburton was in natural powers the best big dog ever brought to America. He could lead any dog I ever saw him go against when he tried, and was the fastest dog out of slips ever trained in St. Louis. In spite of his giant size he would be clear of any dog within a dozen jumps from the slips. But he was never a thoroughly game dog, and quickly got to loafing. He was a successful sire, and begot enough good puppies to be a pillar of the studbook, but ill luck overtook most of them.